

WHAT IS CLAIMED IS:

1. An image reading apparatus comprising:  
an image reading means for reading image data on a  
predetermined pixel region basis;
- 5        a storage means for storing the image data; and  
            a read pixel changing means for changing the  
predetermined pixel region according to the storage  
capacity of said storage means.
- 10        2. An image reading apparatus according to Claim  
1, wherein said read pixel changing means expands the  
predetermined pixel region as storage capacity required  
for storing read image data in said storage means is  
reduced.
- 15        3. An image reading apparatus according to Claim  
2, wherein the storage capacity required for storing  
read image data in said storage means corresponds to  
the kind of original.
- 20        4. An image reading apparatus according to Claim  
2, wherein the storage capacity required for storing  
read image data in said storage means corresponds to  
the reading mode.
- 25        5. An image reading apparatus according to Claim  
2, wherein the storage capacity required for storing

read image data in said storage means corresponds to  
the reading resolution.

6. An image reading apparatus according to Claim  
5 3, wherein the original includes at least a cut paper  
sheet, a postcard, and a photograph.

7. An image reading apparatus according to Claim  
4, wherein the reading mode includes a monochrome mode  
10 and a full color mode.

8. An image reading apparatus according to Claim  
1, further comprising a moving means for effecting a  
relative movement of said image reading means and the  
15 original, wherein said read pixel changing means  
changes the predetermined pixel region in accordance  
with the movement amount of said moving means.

9. An image reading apparatus according to Claim  
20 1, wherein said image reading means performs overlap  
reading on a part of adjacent predetermined pixel  
regions.

10. An image reading apparatus according to Claim  
25 9, wherein the overlap reading range is changed in  
accordance with the predetermined pixel region changed  
by said read pixel changing means.

11. An image reading apparatus according to  
Claim 9, further comprising an averaging means for  
averaging image data obtained through overlap reading.

5        12. An image reading apparatus comprising:  
            a reading head for reading an original image by  
            using a line sensor;  
            a moving means for effecting a relative movement  
            of the reading head and the original image;  
10        a control means for controlling said moving means  
            so as to repeat a relative movement in a first  
            direction perpendicular to the direction in which the  
            line sensor is arranged and a relative movement in a  
            second direction in which the line sensor is arranged;  
15        a storage means for storing image data read by the  
            reading head; and  
            a setting means for setting the reading width of  
            the reading head in one relative movement in the first  
            direction on the basis of the storage capacity of said  
20        storage means.

13. An image reading apparatus comprising:  
            a reading head for reading an original image by  
            using a line sensor;  
25        a moving means for effecting a relative movement  
            of the reading head and the original image;  
            a control means for controlling said moving means

so as to repeat a relative movement in a first direction perpendicular to the direction in which the line sensor is arranged and a relative movement in a second direction in which the line sensor is arranged;

5 and

a setting means for setting the reading width of the reading head in one relative movement in the first direction on the basis of the resolution with which the original image is read.

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14. An image reading apparatus comprising:

a reading head for reading an original image by using a line sensor;

15

a moving means for effecting a relative movement of the reading head and the original image;

a control means for controlling said moving means so as to repeat a relative movement in a first direction perpendicular to the direction in which the line sensor is arranged and a relative movement in a second direction in which the line sensor is arranged; and

a setting means for setting the reading width of the reading head in one relative movement in the first direction on the basis of the size of the original.

25

15. A storage medium for storing a program for controlling an image reading apparatus so as to read

image data on a predetermined pixel region basis, by an  
image reading means store the read image data in a  
storage means, and change the predetermined pixel  
region in accordance with the storage capacity of said  
5 storage means.

16. A storage medium for storing a program for  
controlling an image reading apparatus comprising a  
reading head for reading an original image by using a  
10 line sensor; a moving means for effecting a relative  
movement of the reading head and the original image; a  
control means for controlling the moving means so as to  
repeat a relative movement in a first direction  
perpendicular to the direction in which the line sensor  
15 is arranged and a relative movement in a second  
direction in which the line sensor is arranged; and a  
storage means for storing image data read by the  
reading head,

wherein said program includes a setting module for  
20 setting the reading width of the reading head in one  
relative movement in the first direction on the basis  
of the storage capacity of said storage means.

17. A storage medium for storing a program for  
25 controlling an image reading apparatus comprising a  
reading head for reading an original image by using a  
line sensor; a moving means for effecting a relative

movement of the reading head and the original image;  
and a control means for controlling said moving means  
so as to repeat a relative movement in a first  
direction perpendicular to the direction in which the  
5 line sensor is arranged and a relative movement in a  
second direction in which the line sensor is arranged,  
wherein said program includes a setting module for  
setting the reading width of the reading head in one  
relative movement in the first direction on the basis  
10 of the resolution with which the original image is  
read.

18. A storage medium for storing a program for  
controlling an image reading apparatus comprising a  
15 reading head for reading an original image by using a  
line sensor; a moving means for effecting a relative  
movement of the reading head and the original image;  
and a control means for controlling said moving means  
so as to repeat a relative movement in a first  
20 direction perpendicular to the direction in which the  
line sensor is arranged and a relative movement in a  
second direction in which the line sensor is arranged,  
wherein said program includes a setting module for  
setting the reading width of the reading head in one  
25 relative movement in the first direction on the basis  
of the size of the original.